

**ABSTRACT**

A tuning arrangement in a radio receiver includes a front-end circuit having a tunable band-pass filter that is capable of tunably selecting channels within at least one frequency band of an RF signal. A noise source coupled to an input of the tunable  
5 band-pass filter introduces a wide-band noise signal into the front-end circuit. A signal detector coupled to an output of the front-end circuit measures at least one signal power associated with a filtered noise signal derived from the wide-band noise signal. A tuning controller, coupled to the tunable band-pass filter by a tuning control signal, adjusts the tuning control signal in response to the at least one measured signal power  
10 for tuning the tunable band-pass filter to a desired filter response.